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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,715	07/31/2003	Seung Pun Ho	1928-0153P	9376
2292	7590	05/28/2004		
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
			EXAMINER COMAS, YAHVEH	
			ART UNIT 2834	PAPER NUMBER

DATE MAILED: 05/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

10/630,715

Applicant(s)

HO ET AL.

Examiner

Yahveh Comas

Art Unit

2834

-- Th MAILING DATE f this communication appears n the cover sheet with the corresp ndenc address --

Peri d for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 03/15/2004 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the fan being in contact with the base) are not recited in the rejected claim.

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Argument regarding the collar not being circumferentially fitted to the terminal portion of the commutator is not persuasive since the clamping member 27 which comprise a collar 28, a plurality of radially outwardly extending fan blades 29, and three resilient legs 30 are formed as a unitary plastic molding. Therefore, the collar is circumferentially fitted to the terminal portion by engaging the legs 30 to the lugs section 32 of said terminal portion in a circumferential manner (column 2, lines 40-45).

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Wang U.S. Patent No. 4,859,893.

An electric motor having a wound rotor (3) and a stator, the rotor (3) having a rotor core mounted on a shaft (2) a commutator (20) mounted on the shaft (2) adjacent one end of the rotor (3) core and rotor windings wound around the rotor core and connected to terminals (23) of the commutator (20), and a fan (29) for generating a flow of cooling air, wherein the commutator (20) has a base (21) and a plurality of commutator segments (22) fixed to the base, each segment having a brush contact portion and a terminal and the base having a support portion supporting the brush contact portion of the segments and a terminal portion (21) supporting the terminals (23) and wherein the fan (29) has an integral inner collar (27) from which a plurality of fan blades (29) extend, the collar (27) being circumferentially fitted to the terminal portion (21). The collar (27) is fixed to the terminal portion (21) by complementary formations including snap-fit detents. The commutator is a cylindrical type commutator. Also the complementary formation further include blade like projections (32) extending radially from the terminal portion (21) which engage slots in the collar to prevent circumferential movement of the collar about the terminal portion (21), wherein the terminal portion (21) has a plurality of housings accommodating the terminals and the snap-fit detent include at least one projection formed on each housing.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang U.S. Patent No. 4,859,893 in view of Strobl U.S. Patent No. 5,679,996.

Wang discloses the claimed invention except for:

- The terminal portion and the support portion of the base are separate parts.
- The commutator segments are insulation displacing type terminals and the terminal portion has a plurality of housing in which the terminals and lead wires of the rotor winding are received.

However, Strobl discloses a commutator assembly where the terminal portion (6) is separated from the supporting portion (1) in order to avoid the difficulties in molding this relative bulky and complicated components commutator segments (3) are insulation displacing type terminals and the terminal portion has a plurality of housing in which the

terminals (12) and lead wires (11) of the rotor winding are received in order to simplify assembly and permit more care to be taken to ensure proper insulation displacement during insertion of the terminals into the recesses (column 2, lines 60 - column 3, line 5).

Therefore, it would have been obvious to one having skill in the art at the time the invention was made to separate the terminal portion from the supporting portion since that would have been desirable to avoid the difficulties in molding this relative bulky and complicated component, and provide a commutator segments having insulation displacing type terminals and the terminal portion having a plurality of housing in which the terminals and lead wires of the rotor winding are received in order to ensure proper insulation as disclosed by Strobl.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yahveh Comas whose telephone number is (571)272-2020. The examiner can normally be reached on 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YC



KARL TAMAI
PRIMARY EXAMINER